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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	09/972,076	JOHNSON ET AL.
	Examiner	Art Unit
	JAMES RUTTEN	2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *08 June 2010*.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *84-107* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *84-107* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some *   c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1.   This action is in response to Applicant's submission filed 6/8/2010, responding to the

5/27/2010 Advisory action and the 3/12/2010 Office action which detailed the rejection of claims

84-106. Claims 84, 105, and 106 have been amended and new claim 107 has been added.

Claims 84-107 remain pending in the application and have been fully considered by the

examiner.

Response to Arguments/Amendments

2.   Applicant's arguments filed 6/8/2010 have been fully considered but they are not

persuasive.

3.   On page 10 filed 6/8/2010, Applicant argues with respect to claim 84, that Fig. 1 provides

written description support under 35 U.S.C. § 112, first paragraph. In particular, Applicant notes

the bi-directional arrows and the phrase "results returned." Applicant further notes that Fig. 1

supports the web server returning output of the decision server to the client system. However,

the issue does not regard a written description of "results returned" from the web server.

Applicant fails to address the basis of the rejection which is that there does not appear to be a

description of the remote server (i.e. "code generator 104") returning the output of the decision

service (i.e. "decision server 109") to the client server (i.e. "web server 111"). This rationale is

detailed in the rejection. The rejection of claim 84 under 35 U.S.C. § 112, first paragraph is

maintained.

4.   In regard to the rejection of claim 104 under 35 U.S.C. § 112, first paragraph, Applicant

points to p. 21, line 12, p. 22, lines 15-16, and Figs. 15-17, and to Fig. 16 in particular, for

additional support. However, none of these citations provide any written description to match

the scope of claim 104. Even if Fig. 16 did depict a decision tree, none of these cited portions

even mention a "decision tree," much less a description of the extensive utilization of such

"decision trees" found in claim 104. The rejection is maintained.

5.   The 6/8/2010 amendment has remedied many issues regarding the rejections under 35

U.S.C. § 112, second paragraph. However, several issues remain. Claims 84-103 and 105 are

rejected below.

6.   On page 13 filed 6/8/2010, Applicant argues that interpretation of the claimed "decision

server" is overly broad, and that "business rules in a business layer" cannot read on the claims in

view of the specification. Applicant is correct in suggesting that claims must be interpreted in

light of the specification. However, reading a claim in light of the specification, to thereby

interpret limitations explicitly recited in the claim, is a quite different thing from 'reading

limitations of the specification into a claim,' to thereby narrow the scope of the claim by

implicitly adding disclosed limitations which have no express basis in the claim. It is not clear

what characteristics Applicant is suggesting such a "decision server" to have. Prior art of record

Courts (US 6085220) discloses business rules to assist in making "complicated decisions" (see

column 3 lines 49-53). It is not clear why a server that assists in making decisions cannot be

regarded as a "decision server." The rejections are maintained.

        At the bottom of page 13, Applicant notes the citation of Courts col. 8 lines 18-41.

Presumably, this is in reference to the rejection of claim 84 on page 9 of the 3/12/2010 Office

action. This particular section introduces an obviousness analysis of Courts, which is

subsequently followed by the additional teaching of Mears (US 6041362) which further teaches

remote and client servers. Again, it is not clear which characteristics are intended to be covered

such that an interpretation of remote and client servers cannot be interpreted according to a

reading of remote and client servers, at least as taught by Mears, let alone Courts. The rejection

is maintained.

On pages 13-14, Applicant essentially argues that Courts and APAA does not teach all

the limitations of claim 104. However, the rejection is based upon a combination of references

including prior art of record Mears, and not Courts and APAA alone. For at least this reason,

Applicant's argument is not persuasive. The references combine to teach an obvious

arrangement of data exchange and display.

In response to applicant's argument on page 14, that the examiner has combined an

excessive number of references, reliance on a large number of references in a rejection does not,

without more, weigh against the obviousness of the claimed invention. See In re Gorman, 933

F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

In response to applicant's argument that Courts, Mears, Cluts, Meltzer, Traversant and Ho

are nonanalogous art, it has been held that a prior art reference must either be in the field of

applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which

the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed

invention. See In re Oetiker, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case,

Applicant appears to acknowledge that each of the references at least "skirt around the claimed

subject matter" (see top of page 14 filed 5/12/2010). As such, the references are considered to be

at least "reasonably pertinent" to the problems at hand.

Claim Rejections - 35 USC § 112

7.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making
> and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it
> pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode
> contemplated by the inventor of carrying out his invention.

8.   Claims 84-105 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply

with the written description requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to reasonably convey to one skilled in the relevant

art that the inventor(s), at the time the application was filed, had possession of the claimed

invention.

9.   Claim 84 contains the following limitation: "delivering, by the remote server, the output

to the user at the client server." As support for this limitation, Applicants have cited Fig. 1 and

the "corresponding specification passages," presumably those on pages 17-20 which specifically

mention Fig. 1 and provide an overview of the decisioning service.

        The description on pages 17-20 provides the following. A client 102 uses remote system

101 to develop and refine rules which are passed to code generator 104. Code generator 104

provides software to decision server 109 for executing strategy. Code generator 104 also

generates a web page 107 which is loaded onto web server 111. An additional client system 110

sends data to decision server 109 via web server 111. The decision server 109 processes the data

according to strategy, and returns an output to the web server 111 which further delivers the

output to client system 110.

        According to Fig. 1 and the description on pages 17-20, the "remote server" of claim 84

appears to correspond to code generator 104. Also, the "client server" of claim 84 appears to

correspond to web server 111, and the "decision service" of claim 84 corresponds to decision

server 109. There does not appear to be a description of the code generator 104 returning the

output of the decision server 109 to the web server 111. No further description was found in the

specification to support the claimed limitation.

Claims 85-103 are rejected as being dependent upon a rejected base claim.

10.   Claim 104 contains the following limitations:

> rendering, by a web server at a client server remote and separate from the web server, a
> web page including a first decision tree, the first decision tree comprising a first plurality of linked
> values to help identify a strategy corresponding to the first decision tree...
> ...modifying at least one of the first plurality of linked values in the first decision tree;
> ...
> generating, by the remote decision server, a second decision tree based on the second
> plurality of linked values, the second decision tree comprising a second plurality of linked values
> to help identify the strategy corresponding to the first decision tree;
> passing, by the remote decision server to the web server, the second decision tree; and
> rendering, by the remote web server at the client server, a second web page including the
> second decision tree.

On page 11 filed 7/22/09, Applicants cite Fig. 2 ref. 210 in support of the new claim limitations.

Review of Fig. 2 ref. 210 reveals the following:
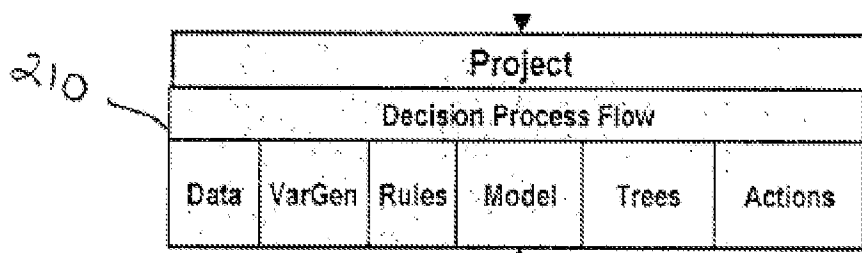
While Fig. 2 ref. 210 shows a diagram which includes a "Trees" box, and it is further connected

to several other boxes, there is simply no interpretation to support the cited limitations associated

with a first and second decision tree. The specification provides discussion of decision trees on

page 6 lines 8 and 10, and page 44 lines 19-23. Further review of the specification does not

reveal any such rendering of web pages including decision trees, decision trees comprising

linked values, "second decision tree," nor any generating, passing, or rendering of the second

decision tree as is currently claimed. No further mention of decision trees was found in the

specification, and the cited passages do not discuss decision trees in connection with the system

of Figs. 1 or 2, nor any "second decision tree" or any operations related to one.

11.   In anticipation of claim 105 being amended to depend upon claim 104, claim 105 is

rejected as being dependent upon a rejected base claim.

12.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

13.   Claims 84-103 and 105 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

14.   Claim 84 recites the limitation "the user at the client server" in line 19. There is

insufficient antecedent basis for this limitation in the claim. For the purpose of further

examination, this limitation will be interpreted simply as "the client server."

15.   Claims 85-103 are rejected as being dependent upon a rejected base claim.

16.   Claim 105 recites the limitation "A method as in claim 1" in line 1. There is insufficient

antecedent basis for this limitation in the claim. For the purpose of further examination, this

limitation will be interpreted simply as "A method as in claim 104."

Claim Rejections - 35 USC § 103

17.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

18.   Claims 84, 85, and 87 are rejected under 35 U.S.C. 103(a) as being unpatentable over US

6085220 to Courts et al. ("Courts") in view of U.S. Patent 6,041,362 to Mears et al. ("Mears").

As per claim 84, Courts et al. teach a *computer-implemented method* (See column

6 lines 10-50, e.g. "computer system"), for an all-purpose decision service/server/engine

returning a real-time decision in ASP mode to an end user/client (e.g., col.3:24-27 & 34-

35, col.7:38-46, col.9:30-35),

Courts further discloses:

receiving, ...data characterizing at least one rule for making decisions based on

an input data; e.g., see *business logic & business object 22* FIG.1 & associated text at

least at column 3 lines 61-64:

> Business layer 16 provides the business logic for the web system. Business layer 16 includes the business rules of the system which are carefully isolated from the presentation layer. The business rules can be implemented as COM business objects 22 within business layer 16.

Also column 4 lines 3-5, e.g. "business rule development."

generating, at a client server by the remote server ... at least a portion of a web

page for receiving the input data, the portion of the web page corresponding to the at

least one rule; e.g., see Abstract, see *interaction layer 12 & HTTP* FIG.1 & associated

text, col.9:30-32; col.4:13-16. Also see column 3 lines 34-37:

> Presentation Layer 14 can server to **generate web pages** for interaction with the user. In one implementation, presentation layer 14 includes hypertext markup language (HTML) pages augmented by a special set of tags. [emphasis added]

initiating, ...a decision service for producing an output by applying the at least

one rule to the input data, the output corresponding to at least one recommendation,

reason code, decision or a score; e.g., col.1:56-58, col.3:47-53:

> Further, using a server side tag set and standard HTML, developers can create a large proportion (e.g., 90%) of all pages without custom code. At the same time, such pages can have the power to access information in legacy systems through integration layer 18, **utilize business rules in business layer 16 to make complicated decisions, and display customized content**. [emphasis added]

Also see *html generation* FIG.1 & associated text. Note that generation of a service must

occur in order to a decision to occur. That is, without a decision service, a decision

would not be made.

receiving, ...the input data from a user via the web page, the input data modifying

the output; transmitting ... the input data in a first format; e.g., see Abstract, see

interaction layer 12 & HTTP FIG.1 & associated text, col.4:13-16, and also col.9:30-32:

> The request is commonly an HTTP request generated by remote user software such as a web browser.

invoking, ...the decision service on the decision server to produce an output by

applying the at least one rule to the input data; and e.g., col.1:56-58:

> A business layer is coupled to the presentation layer and provides **business logic for use by the presentation layer in generating the responsive web pages**. [emphasis added]

Note that the business logic must be *invoked* by the presentation layer in order to generate

the responsive web page. Also col.3:51-52,61-64, also see *html generation* FIG.1 &

associated text.

...the invoking comprising sending data to the decision server in a second format

different from the first format See column 2 lines 55-57, e.g. "DCOM."

      delivering, ... the output to the user. e.g., see Abstract, col.1:52-54, also see

column 9:53-54: "When the web page is built, it is sent to the requesting user."

      Limitations related to the *remote server*, and the *client server* have not been

addressed in the above citations. Courts does not expressly disclose a strict arrangement

of computing systems, but rather focuses on required functionality. Nonetheless, Courts

does broadly address arrangements of computer systems. See column 8 lines 18-41:

> Referring to FIG. 3B, the **global session server can also be distributed across multiple physical computer systems**. As with FIG. 3A, a web system 210 includes multiple render engines 212. Render engines 212 interface to session managers 214. Each session manager 214 includes a broker 216 and a session cache 218. Each session cache 218 can interface with multiple global session servers 220 which is maintained in memory for quick access. **Render engines 212 can be distributed across multiple physical computer systems, and one or more render engine 212 can exist on any of the physical computer systems at a particular point in time**. When a user engages in a session with the web system, **requests from the user will be directed to render engines 212. In servicing a user request, render engines 212 can get current state information for that session through the respective session manager 214 and session cache 218 and from one of the global session servers 220**. Brokers 216 are use to locate the global session server 220 that stores the master copy of session data for the particular user session. Session cache 218 can then interface with the correct global session server 220 to obtain the session data. Render engines 202 then operate to process requests using the session information and return web content that reflects the state of the user session.

It is clear from Courts that many physical arrangements are possible, and it would have

been obvious to one of ordinary skill in the art at the time the invention was made to use

a remote server and a client server as claimed in order to accommodate any particular

requirements as suggested by Courts.

Courts does not expressly disclose: *the remote server being different and remote from the client server ... a decision server remote from both the remote server and the client server ... the client server to the decision server.* However, Mears teaches enterprise environments containing numerous networked/remote servers, including remote servers (e.g. see Fig. 1 element 30, "Remote Application library") and web servers (e.g. see Fig. 1 element 32, "HTTP server") in communication with each other and with a client (e.g. see Fig. 1 element 12 "Client"). Mears teaches that each server has a specialized function that work cooperatively. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Courts' system in Mears' enterprise environment, as a person with ordinary skill has good reason to pursue the known options within his or her technical grasp. In turn, since the network topology of the claim has the properties predicted by the prior art, it would have been obvious to make such a network.

In regard to claim 85, the above rejection of claim 84 is incorporated. Courts further discloses: *wherein the at least one rule comprises at least one model, expression or a strategy.* e.g., see column 3 lines 64-65 which discloses business rules as expressions in COM business objects.

In regard to claim 87, the above rejection of claim 84 is incorporated. Courts further discloses: *wherein the at least one rule corresponds to a project, the project*

corresponds to a plurality of rules. e.g., see project database 148 FIG.2B & associated

text.

19.   Claim 86 is rejected under 35 U.S.C. 103(a) as being unpatentable over Courts and Mears

as applied to claim 84 above, and further in view of U.S. Patent 6,466,971 to Humpleman et al.

("Humpleman").

        In regard to claim 86, the above rejection of claim 84 is incorporated. Courts

does not expressly disclose: *generating xml schema corresponding to the at least one*

rule; generating an xml parser for extracting the input data conforming to the xml

schema; and, invoking the xml parser to extract the input data conforming to the xml

schema from the web page. However, Humpleman et al. discloses sending XML input

data (e.g., see commands/XML FIG.14 & associated text, see XML-RPC Action FIG.19)

from an end user/client system (e.g., see A FIG. 14 & associated text, see HN Device A:

Controller Module FIG.19 & associated text) to a decision server (e.g., see S FIG.14 &

associated text, see HN Device B: Controller Module FIG.19 & associated text) via a web

server (e.g., see server 14 FIG.14 & associated text, see HN Device Web Server 86

FIG.19 & associated text). Humpleman et al. further discloses generating an XML

schema for providing to the client system for collecting said input data and providing to

Web server for use in error handling, or data validation (e.g., see CALL.DTD &

INTERFACE.DTD & Web Server Layer FIG.18 & associated text, see Device A XML

Interface 72 FIG.19 & associated text) and generating an XML parser (e.g., see XML

Layer IN 70 & XML Layer OUT 68 FIG.18 & associated text, see XML parser 74

FIG.19 & associated text) for reading data conforming to said XML schema. Note that

XML parser 74 must first be generated before being used. It would have been obvious to

one of ordinary skill in the pertinent art at the time the invention was made to modify

Courts et al.'s teaching to include the teaching as set forth by Humpleman et al. to

produce the expected result with reasonable success. And the motivation for doing so

would have been that the formatting of data into syntactically correct XML document(s)

depends upon adhering to a predefined definition language describing the structure and

set of constraints (i.e., XML schema) on which an XML documents shall be constructed

from said data. Furthermore, XML parsers enable the processing and extracting of data

in textual representation within XML tags and transforming them into specific-typed

objects/data structure (e.g., C, C++, or Java objects) which can be retrieved for use by

servers and software applications. XML parsers check XML documents being parsed for

conformance to XML rules. Most recent XML parsers, at the time the invention was

made, are implemented with integrated support for XML schemas to further enable data

validation.

20.   Claims 88 and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Courts

and Mears as applied to claim 84 above, and further in view of U.S. Patent 6018732 to Bertrand

et al. ("Bertrand").

In regard to claim 88, the above rejection of claim 84 is incorporated. Courts further discloses: *wherein the at least one rule is validated.* See column 4 lines 8-10, i.e. "unit tested." Courts does not expressly disclose: *by a plurality of simulated transactions.* However, Bertrand et al. disclose a method and apparatus for returning real-time decisions/scores/calculated results (e.g., see Abstract, see FIG.2 & associated text), wherein rules are tested in runtime mode by a test service comprising a wrapper (e.g., see presentation 210, activity 220 FIG.2 & associated text, see col.21:55-62, FIG.8 & associated text). Bertrand further discloses simulation models for validating simulated transactions (e.g., see simulation engine 270, simulation models 260 FIG.2 & associated text, in particular, see column 11 lines 10-15, e.g. "simulation inputs"). It would have been obvious to one of ordinary skill in the pertinent art at the time the invention was made to incorporate the teaching of Bertrand et al. into that of Courts to obtain runtime test service comprising a wrapper for the control panel and for an Excel testing program. And the motivation for doing so would have been that the usage of Excel spreadsheets in the test service/program enables business logic/rules/functions to be collected, and simulated for testing purpose. Also, simulation allows design components as suggested by Bertrand (see column 11 line 9).

In regard to claim 89, the above rejection of claim 88 is incorporated. Bertrand further discloses: *generating a test report corresponding to the plurality of simulated transactions.* See column 11 lines 13-15, i.e. "notifies the system of the status." It would have been obvious to one of ordinary skill in the pertinent art at the time the invention

was made to use Court's unit test with Bertrand's test reports in order to obtain

appropriate feedback as suggested by Bertrand (see column 11 line 15).

21.   Claims 90-91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Courts and

Mears as applied to claim 84 above, and further in view of U.S. 6,687,873 to Ballantyne et al.

("Ballantyne").

        In regard to claim 90, the above rejection of claim 84 is incorporated. Courts

does not expressly disclose: *wherein the at least one rule is received from a rule*

designing software, the rule designing software having a graphical user interface

adapted for graphical illustration of the at least one rule. However, *Ballantyne* teaches

the use of software for designing rules using a graphical user interface. See at least Fig. 1

element 30 and associated text in column 6 lines 63-65, e.g. "modeling/mapping

graphical user interface 30." It would have been obvious to one of ordinary skill in the

pertinent art at the time the invention was made to incorporate *Ballantyne's* rule

designing software with *Courts'* rules in order to reduce the time and expense of system

modification as suggested by *Ballantyne* (see column 4 lines 50-54).

        In regard to claim 91, the above rejection of claim 91 is incorporated. Courts

does not expressly disclose: *wherein the graphical illustration of the at least one rule is*

provided in a form of a tree or a graph. However, *Ballantyne* discloses this in Fig. 6

element 56. It would have been obvious to one of ordinary skill in the art at the time the

invention was made to use *Courts'* rules in order to reduce the time and expense of

system modification as suggested by *Ballantyne* (see column 4 lines 50-54).

22.   Claims 92, 93, 96, and 103 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Courts and Mears as applied to claim 84 above, and further in view of U.S. Patent

5,999,911 to Berg et al. ("Berg").

        In regard to claim 92, the above rejection of claim 84 is incorporated. Courts

does not expressly disclose: *wherein the at least one rule corresponds to a project*

comprising expression sequences, segmentation trees and workflow lists arranged into a

user-selected order, However, Berg teaches interactive creation of workflow using

expression sequences and segmentation trees. See at least column 4 lines 14-17, i.e.

"interactively create a workflow definition. Berg further teaches:

> *the expression sequences assigning values to one or more fields,* See Figs. 5 and
>
> 6, also see associated text in at least column 9 lines 18-20: "When the designer
>
> clicks on a graphic representing a step in the flow builder, the flow builder
>
> displays a "BASIC ATTRIBUTES" dialog box as shown in FIG. 5." The field
>
> values are saved as expression sequences in text based flow definition language as
>
> described in column 9 lines 63-66.
>
> *the workflow lists corresponding to one or more workflow steps processed during*
>
> *a run-time execution,* See at least column 16 lines 29-34, e.g. "When a user elects
>
> to open the "flowname.flow" workflow file, the workflow manager displays the

flow setting steps to the states mandated by their dependencies. After opening the

workflow file, the user(s) can begin to perform work with the workflow."

the segmentation trees arranging workflow steps into one or more nodes

configured in tree branches. See Fig. 4; also see the associated text in at least

column 9 lines 8-11, e.g. "To create a step, the designer can select one of the step

icons, which include a task step 104, an activity step 106, a decision step 108, and

a subflow step 110." Designers create workflow by using the "segmentation

trees" shown in Fig. 4.

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to use Berg's teaching of workflow with Courts' decision service in

order to utilize improved methods for managing complex design processes as suggested

by Berg (see at least column 2 lines 24-26).

In regard to claim 93, the above rejection of claim 92 is incorporated. Courts

does not expressly disclose: *wherein the user-selected order is sequential or hierarchical.*

However, Berg further teaches a hierarchical order. See column 4 line 25, e.g.

"dependency relationships." It would have been obvious to one of ordinary skill in the

art at the time the invention was made to use Berg's teaching of hierarchical ordering with

Courts' decision service in order to utilize improved methods for managing complex

design processes as suggested by Berg (see at least column 2 lines 24-26).

In regard to claim 96, the above rejection of claim 92 is incorporated. Courts further discloses use of a model. See at least column 4 lines 61-63, i.e. "profile." Courts does not expressly disclose the remaining limitations. However, Berg further teaches: *wherein at least one of the expression sequences, segmentation trees and workflow lists reference at least one model.* See Berg column 4 line 25, i.e. "template." It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Berg's model referencing with Courts' model in order to utilize improved methods for managing complex design processes as suggested by Berg (see at least column 2 lines 24-26).

In regard to claim 103, the above rejection of claim 92 is incorporated. Courts does not expressly disclose: *wherein the projects are configured using an inventory of project items, the inventory of project items comprising one or more expression sequences, segmentation trees and workflow lists.* See at least column 7 line 2, i.e. "workflow management database." It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Berg's inventory with Courts' model in order to manage workflow as suggested by Berg.

23.   Claim 94 is rejected under 35 U.S.C. 103(a) as being unpatentable over Courts, Mears, and Berg as applied to claim 92 above, and further in view of U.S. Patent 4,931928 to Greenfeld ("Greenfeld").

In regard to claim 94, the above rejection of claim 92 is incorporated. Courts and Berg does not expressly disclose: *wherein the expression sequences are configured by using a table with at least three columns, the first column displaying an identifier of a data field, the second column displaying a data type of the data field, the third column displaying at least one of the field, value, or expression that is assigned to the data field.* However, Greenfeld teaches use of a symbol table providing a dictionary of symbols defining type and name-spaces (i.e. "field") for the symbol. See column 5 lines 5-8. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Berg's expression sequence with Greenfeld's symbol table in order to provide a dictionary of symbols available in a program, thereby providing reference for variables.

24.   Claim 95 is rejected under 35 U.S.C. 103(a) as being unpatentable over Courts, Mears, and Berg as applied to claim 92 above, and further in view of U.S. Patent 5,475,588 to Schabes et al. ("Schabes").

In regard to claim 95, the above rejection of claim 92 is incorporated. Courts and Berg does not expressly disclose: *wherein the nodes arranged in tree branches are executed top-down, from left to right.* However, Schabes teaches traversing trees in a top-down, left-right manner. See column 23 lines 50-52. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Berg's nodes with Schabes' top-down/left-right traversal in order to provide an efficient traversal as suggested by Schabes (see column 23 lines 34-44).

25.   Claims 97-99 are rejected under 35 U.S.C. 103(a) as being unpatentable over Courts,

Mears, and Berg as applied to claim 96 above, and further in view of Bertrand.

In regard to claim 97, the above rejection of claim 96 is incorporated. Courts and

Berg does not expressly disclose: *wherein the at least one model comprises one or more*

characteristics and one or more attributes corresponding to the one or more

characteristics. However, Bertrand teaches the use of characteristics and attributes. See

at least column 21 lines 56-58, i.e. "property" and "particular value," respectively. It

would have been obvious to one of ordinary skill in the art at the time the invention was

made to use Courts' model with Bertrand's "characteristics and attributes" in order to

represent objects in a model that can be used in a simulation as suggested by Bertrand

(see column 21 lines 15-27).

In regard to claim 98, the above rejection of claim 97 is incorporated. Courts and

Berg does not expressly disclose: *wherein the at least one model is configured to assess a*

data record based on at least one characteristic, the at least one model is further

configured to generate a score based on the at least one attribute corresponding to the at

least one characteristic. However, at column 154 lines 8-22, Bertrand teaches assessing

a data record (e.g. "expert metrics") based on characteristics (e.g. "% down") and

generating scored based on attributes (e.g. "appropriate conclusion.") It would have been

obvious to one of ordinary skill in the art at the time the invention was made to use

Courts' model with Bertrand's teachings of data records and scores in order to provide

appropriate conclusions regarding complex decisions as suggested by Bertrand.

In regard to claim 99, the above rejection of claim 97 is incorporated. Courts and

Berg do not expressly disclose: *wherein at least one characteristic corresponds to a*

predictive variable. However, Bertrand teaches predictive variables at least at column

154 lines 10-13, e.g. "% down." Each of these variables predict whether a home purchase

would be a good buy. It would have been obvious to one of ordinary skill in the art at the

time the invention was made to use Courts' model with Bertrand's predictive variables in

order to provide appropriate conclusions regarding complex decisions as suggested by

Bertrand.

26.   Claim 100 is rejected under 35 U.S.C. 103(a) as being unpatentable over Courts, Mears,

Berg, and Bertrand as applied to claim 99 above, and further in view of U.S. Patent 4,772,882 to

Mical ("Mical").

In regard to claim 100, the above rejection of claim 99 is incorporated. Courts,

Berg, and Bertrand do not expressly disclose: *wherein the predictive variable is selected*

automatically. However, Mical teaches automatic selection of variables. See column 9

lines 20-25, i.e. "automatically selected." It would have been obvious to one of ordinary

skill in the art at the time the invention was made to use Bertrand's predictive variables

with Mical's automatic selection in order to select items simply and expediently as

suggested by Mical (see column 1 lines 41-44).

27.   Claims 101-102 are rejected under 35 U.S.C. 103(a) as being unpatentable over Courts,

Mears, and Berg as applied to claim 96 above, and further in view of "An additive reliability

model for the analysis of modular software failure data," by Xie et al (hereinafter "Xie")

        In regard to claim 101 the above rejection of claim 96 is incorporated. Courts and

Berg do not expressly disclose: *wherein the at least one model is a discrete additive*

model. However, Xie teaches the use of an additive model. See Section 2 on page 189,

i.e. "additive model." It would have been obvious to one of ordinary skill in the art at the

time the invention was made to use Xie's additive model with Courts' model in order to

utilize available knowledge as suggested by Xie (see top of left column, page 190).

        In regard to claim 102, the above rejection of claim 96 is incorporated. Courts

and Berg do not expressly disclose: *wherein the at least one model produces a score as a*

result of an execution. However, Xie teaches production of a score as a result of a

calculation. See bottom of left column on page 189, i.e. "expected cumulative number."

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to use Courts' model with Xie's "score" in order to assess a system as

suggested by Xie (see bottom right column on page 188).

28.   Claim 104 is rejected under 35 U.S.C. 103(a) as being unpatentable over Courts in view

of Mears and Applicant's Admitted Prior Art appearing on pages 1-7 of the originally filed

specification (hereinafter "AAPA").

In regard to claim 104, Courts discloses:

A computer-implemented method comprising:

rendering, ..., a web page including a first < web input>, the first < web input>

comprising a first plurality of linked values to help identify a strategy corresponding to

the first <web input>, the web page including graphical user interface elements

corresponding to the first plurality of linked values; see column 3 lines 34-37:

> Presentation Layer 14 can server to **generate web pages** for **interaction with the user**.
> In one implementation, presentation layer 14 includes **hypertext markup language
> (HTML) pages** augmented by a special set of tags… At the same time, such pages can
> have the power to access information in legacy systems through integration layer 18,
> **utilize business rules in business layer 16 to make complicated decisions**, and display
> customized content. [emphasis added]

receiving user-generated input via one or more of the graphical user interface

elements on the web page modifying at least one of the first plurality of linked values in

the first <web input>; passing, ...the user modified first plurality of linked values;

passing, ... the user modified first linked values; See column 7 lines 38-46, e.g. "web

interactions."

calculating, ...a second plurality of linked values based on the user modified first

linked values and a pre-defined decision model; generating, ... a second <web input>

based on the second plurality of linked values, the second <web input> comprising a

second plurality of linked values to help identify the strategy corresponding to the first

<web input>; passing, ... the second decision tree; and rendering, ...a second web page

including the second <web input>. See column 7 lines 40-44, e.g. "multiple web

interactions."

Limitations related to the *remote server*, and the *client server* have not been

addressed in the above citations. Courts does not expressly disclose a strict arrangement

of computing systems, but rather focuses on required functionality. Nonetheless, Courts

does broadly address arrangements of computer systems. See column 8 lines 18-41:

> Referring to FIG. 3B, the **global session server can also be distributed across multiple physical computer systems**. As with FIG. 3A, a web system 210 includes multiple render engines 212. Render engines 212 interface to session managers 214. Each session manager 214 includes a broker 216 and a session cache 218. Each session cache 218 can interface with multiple global session servers 220 which is maintained in memory for quick access. **Render engines 212 can be distributed across multiple physical computer systems, and one or more render engine 212 can exist on any of the physical computer systems at a particular point in time.** When a user engages in a session with the web system, **requests from the user will be directed to render engines 212. In servicing a user request, render engines 212 can get current state information for that session through the respective session manager 214 and session cache 218 and from one of the global session servers 220.** Brokers 216 are use to locate the global session server 220 that stores the master copy of session data for the particular user session. Session cache 218 can then interface with the correct global session server 220 to obtain the session data. Render engines 202 then operate to process requests using the session information and return web content that reflects the state of the user session.

It is clear from Courts that many physical arrangements are possible, and it would have

been obvious to one of ordinary skill in the art at the time the invention was made to use

a remote server and a client server as claimed in order to accommodate any particular

requirements as suggested by Courts. Furthermore, Courts does not expressly disclose:

the remote decision server being separate and remote to both the web server and the

client server; However, Mears teaches enterprise environments containing numerous

networked/remote servers, including remote servers (e.g. see Fig. 1 element 30, "Remote

Application library") and web servers (e.g. see Fig. 1 element 32, "HTTP server") in

communication with each other and with a client (e.g. see Fig. 1 element 12 "Client").

Mears teaches that each server has a specialized function that work cooperatively. Thus,

it would have been obvious to one of ordinary skill in the art at the time the invention was

made to use Courts' system in Mears' enterprise environment, as a person with ordinary

skill has good reason to pursue the known options within his or her technical grasp. In

turn, since the network topology of the claim has the properties predicted by the prior art,

it would have been obvious to make such a network.

Courts does not expressly disclose: *decision tree.* However, AAPA teaches that

decision trees are used by Attar Software in a KBS development package (see AAPA

page 6 lines 6-14). It would have been obvious to one of ordinary skill in the art at the

time the invention was made to use AAPA's decision trees with Courts' web page in order

to express logic in a more efficient way as suggested by AAPA.

29.   Claim 105 is rejected under 35 U.S.C. 103(a) as being unpatentable over Courts, Mears,

and AAPA as applied in the above rejection of claim 104, and further in view of "An ASP You

Can Grasp: The ABCs of Active Server Pages" by Cluts, and U.S. Patent 6,226,675 to Meltzer et

al. ("Meltzer").

In regard to claim 105, the above rejection of claim 104 is incorporated. Courts,

Mears and AAPA does not expressly disclose: *wherein the modified first plurality of*

linked values passed by the client server to the web server comprises an XML document,

and wherein the modified first linked values passed by the web server to the remote

decision server comprises an ASP file, the ASP file being in a different format from the

XML document. However, Meltzer teaches the use of XML for transmitting information.

See at least column 2 lines 34-38. It would have been obvious to one of ordinary skill in

the art at the time the invention was made to use Courts' input using Meltzer's XML in

order to exchange information and services using self-defining, machine-readable

documents, such as XML (Extensible Markup Language) based documents, that can be

easily understood amongst the partners as suggested by Meltzer. Furthermore, Cluts

teaches using ASP files for providing information (see Cluts page 1 paragraph 3). It

would have been obvious to one of ordinary skill in the art at the time the invention was

made to provide Courts' data using ASP in order to combine multiple elements into one

file providing automatic compilation as suggested by Cluts (see page 1 paragraph 3).

30.   Claim 106 is rejected under 35 U.S.C. 103(a) as being unpatentable over Courts, Mears,

Cluts, Meltzer, U.S. Patent 7,577,834 to Traversat et al. ("Traversat"), and U.S. Patent 5,836,771

to Ho et al. ("Ho").

        In regard to claim 106, Courts discloses:

        A decisioning service computing system (see at least column 6 lines 20-30)

comprising:

        a client system; a web server coupled to the client system; See column 7 lines 8-

12, e.g. "browser" and "web server."

a decision server coupled to the web server; See Fig. 1 element 16, e.g.

"Business Layer" *and*

a code generator computing system See Fig. 1 element 14, e.g. "HTML

generation".

It should be noted that Courts does not expressly disclose a strict

arrangement of computing systems, but rather focuses on required functionality.

Nonetheless, Courts does broadly address arrangements of computer systems as

suggested above. Also see column 5 lines See column 8 lines 18-41:

> Referring to FIG. 3B, the **global session server can also be distributed across multiple physical computer systems.** As with FIG. 3A, a web system 210 includes multiple render engines 212. Render engines 212 interface to session managers 214. Each session manager 214 includes a broker 216 and a session cache 218. Each session cache 218 can interface with multiple global session servers 220 which is maintained in memory for quick access. **Render engines 212 can be distributed across multiple physical computer systems, and one or more render engine 212 can exist on any of the physical computer systems at a particular point in time.** When a user engages in a session with the web system, **requests from the user will be directed to render engines 212. In servicing a user request, render engines 212 can get current state information for that session through the respective session manager 214 and session cache 218 and from one of the global session servers 220.** Brokers 216 are use to locate the global session server 220 that stores the master copy of session data for the particular user session. Session cache 218 can then interface with the correct global session server 220 to obtain the session data. Render engines 202 then operate to process requests using the session information and return web content that reflects the state of the user session.

It is clear from Courts that many physical arrangements are possible, and it would

have been obvious to one of ordinary skill in the art at the time the invention was

made to use a variety of systems and servers as claimed in order to accommodate

any particular requirements as suggested by Courts. Furthermore, Mears teaches

enterprise environments containing numerous networked/remote servers,

including remote servers (e.g. see Fig. 1 element 30, "Remote Application

library") and web servers (e.g. see Fig. 1 element 32, "HTTP server") in

communication with each other and with a client (e.g. see Fig. 1 element 12

"Client"). Mears teaches that each server has a specialized function that work

cooperatively. Thus, it would have been obvious to one of ordinary skill in the art

at the time the invention was made to use Courts' system in Mears' enterprise

environment, as a person with ordinary skill has good reason to pursue the known

options within his or her technical grasp. In turn, since the network topology of

the claim has the properties predicted by the prior art, it would have been obvious

to make such a network.

> ...

> *(i) strategy service software on the decision server for executing strategy;*

e.g. see col.1:56-58, col.3:47-53:

>> Further, using a server side tag set and standard HTML, developers can create a
>> large proportion (e.g., 90%) of all pages without custom code. At the same time,
>> such pages can have the power to access information in legacy systems through
>> integration layer 18, **utilize business rules in business layer 16 to make
>> complicated decisions, and display customized content**. [emphasis added]

Courts does not expressly disclose: *(ii) an XML schema, (iii) an XML*

parser / builder for reading data conforming to the XML schema, However,

Traversat teaches XML schema and XML parsers. See column 21 lines 32-35.

>> The XML schema may be parsed by the XML parser that may convert the XML schema
>> into an internal form suitable for quick access during a message verification process.

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to use Courts' input with Traversat's XML in order to provide

verification as suggested by Traversat.

(iv) a web page that is loaded onto the web server for facilitating

communication see column 3 lines 34-37:

> Presentation Layer 14 can server to **generate web pages** for interaction with the
> user. In one implementation, presentation layer 14 includes hypertext markup
> language (HTML) pages augmented by a special set of tags. [emphasis added]

Courts does not expressly disclose: *in ASP mode between the client system and*

the decision server; However, Cluts teaches using ASP files for providing

information (see Cluts page 1 paragraph 3). It would have been obvious to one of

ordinary skill in the art at the time the invention was made to provide Courts' data

using ASP in order to combine multiple elements into one file providing

automatic compilation as suggested by Cluts (see page 1 paragraph 3).

Also, while Courts discloses a code generator for generating a web page,

Courts does not expressly disclose a code generator for *generating* the remaining

software. However, Courts and Traversat disclose the need for such software, and

Courts even discloses that such a code generator can be utilized. Thus, it would

have been obvious to a person of ordinary skill in the art to try Courts' code

generation with the remaining software elements, as a person of ordinary skill has

good reason to pursue the known options within his or her technical grasp. In

turn, because code generation as claimed has the properties predicted by the prior

art, it would have been obvious to make such a code generator.

Courts does not expressly disclose: *wherein the generated XML schema is*

provided to the client system for collecting input data and ensuring the input data

from the client system conforms to the XML schema, a copy of the XML schema

residing on the web server to validate input data intended for the decision server;

However, Traversat teaches providing XML schemas to clients as well as on a

service to verify XML using a so-called "gate." See column 16 lines 21-25. It

would have been obvious to one of ordinary skill in the art at the time the

invention was made to use Courts' input data with Traversat's XML schema in

order to ensure that the data is in the allowed format as suggested by Traversat

(see column 7 lines 35-39).

Courts does not expressly disclose: *wherein the client system sends data to the decision*

server via the web server in the form of an XML document and the web server sends a

corresponding ASP file to the decision server; However, Traversat teaches use of XML.

See column 24 lines 50-52. Furthermore, Meltzer teaches the use of XML for

transmitting information. See at least column 2 lines 34-38. It would have been obvious

to one of ordinary skill in the art at the time the invention was made to use Courts' input

using Meltzer's XML in order to exchange information and services using self-defining,

machine-readable documents, such as XML (Extensible Markup Language) based

documents, that can be easily understood amongst the partners as suggested by Meltzer.

Furthermore, Cluts teaches using ASP files for providing information (see Cluts page 1

paragraph 3). It would have been obvious to one of ordinary skill in the art at the time

the invention was made to provide Courts' data using ASP in order to combine multiple

elements into one file providing automatic compilation as suggested by Cluts (see page 1

paragraph 3). Furthermore, Ho teaches the general concept of a web server which acts as

middleware between a client and a back-end server. See column 9 lines 23-30, also Fig.

2:

> In one embodiment, the grammatical analyzer 102, the grammatical rules 104 and the grammatical table 114 are in a **client computer**. The programming-steps generator 108, the semantic rules 110, the semantic tables 118 and the table-structure dictionary are in a **middleware apparatus**, which can be a Web server. The programming-steps executor 112 with the topic-related tables are in a **back-end server**, which can be a database server.

Thus, it would have been obvious to a person of ordinary skill in the art to try such middleware, as a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. In turn, because the client/web server/decision server as claimed has the properties predicted by the prior art, it would have been obvious to make such a middleware.

Courts does not expressly disclose: *wherein the web server calls the parser / builder to convert XML format data into a format that can be processed by the decision server and returns results via XML to the client system.* However, Traversat further teaches the use of parsing XML and conversion into an internal format. See column 24 lines 11-13:

> The conductor may parse this XML document into an internal form and enforce message ordering (and/or other rules) according to the enclosed ordering information.

Furthermore, Traversat teaches returning results to the client. See column 24 lines 28-31, e.g. "display results." Also, Meltzer teaches the use of XML for transmitting information as addressed above.

31.   Claim 107 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,546,545 to Honarvar et al. ("Honarvar") in view of Humpleman, Berg, and U.S. Patent 5,465,258 to Adams ("Adams").

In regard to claim 107, Honarvar discloses:

A method for developing rules using a decision engine, (see Honarvar Fig. 8) *the*

method being implemented by one or more data processors (See Honarvar Fig. 22) *and*

comprising:

Honarvar discloses model files (e.g. see Fig. 16, look-up table 240 and associated

text). Honarvar does not expressly disclose: *converting, by at least one data processor,*

model files into data with a model editor component; organizing, by at least one data

processor, the data according to hierarchical structures; importing, by at least one data

processor, the data into a designer component; However, Humpleman et al. teaches

sending XML input data (e.g., see commands/XML FIG.14 & associated text, see XML-

RPC Action FIG.19) from an end user/client system (e.g., see A FIG. 14 & associated

text, see HN Device A: Controller Module FIG.19 & associated text) to a decision server

(e.g., see S FIG.14 & associated text, see HN Device B: Controller Module FIG.19 &

associated text) via a web server (e.g., see server 14 FIG.14 & associated text, see HN

Device Web Server 86 FIG.19 & associated text). Humpleman et al. further discloses

generating an XML schema for providing to the client system for collecting said input

data and providing to Web server for use in error handling, or data validation (e.g., see

CALL.DTD & INTERFACE.DTD & Web Server Layer FIG.18 & associated text, see

Device A XML Interface 72 FIG.19 & associated text) and generating an XML parser

(e.g., see XML Layer IN 70 & XML Layer OUT 68 FIG.18 & associated text, see XML

parser 74 FIG.19 & associated text) for reading data conforming to said XML schema.

Note that XML parser 74 must first be generated before being used. It would have been

obvious to one of ordinary skill in the pertinent art at the time the invention was made to modify Honarvar's models to include the teaching as set forth by Humpleman to produce the expected result with reasonable success. And the motivation for doing so would have been that the formatting of data into syntactically correct XML document(s) depends upon adhering to a predefined definition language describing the structure and set of constraints (i.e., XML schema) on which an XML documents shall be constructed from said data. Furthermore, XML parsers enable the processing and extracting of data in textual representation within XML tags and transforming them into specific-typed objects/data structure (e.g., C, C++, or Java objects) which can be retrieved for use by servers and software applications. XML parsers check XML documents being parsed for conformance to XML rules. Most recent XML parsers, at the time the invention was made, are implemented with integrated support for XML schemas to further enable data validation.

Honarvar discloses projects with workflow functional components. See Fig. 8. Honarvar does not expressly disclose: *defining, by at least one data processor, projects with workflow functional components, the workflow functional components comprising: expression sequences, segmentation trees, and workflow lists;* However, Berg teaches interactive creation of workflow using expression sequences and segmentation trees. See at least column 4 lines 14-17, i.e. "interactively create a workflow definition."

assigning, by at least one data processor, values to local fields and modifying local field values with the expression sequences; See Berg Figs. 5 and 6, also see associated text in at least column 9 lines 18-20: "When the designer clicks on a graphic

representing a step in the flow builder, the flow builder displays a "BASIC

ATTRIBUTES" dialog box as shown in FIG. 5." The field values are saved as

expression sequences in text based flow definition language as described in column 9

lines 63-66.

> *creating, by at least one data processor, project workflow with the segmentation*

trees; See Berg Fig. 4; also see the associated text in at least column 9 lines 8-11, e.g.

"To create a step, the designer can select one of the step icons, which include a task step

104, an activity step 106, a decision step 108, and a subflow step 110." Designers create

workflow by using the "segmentation trees" shown in Fig. 4.

> *identifying, by at least one data processor, a set of steps that are processed during*

runtime execution with the workflow lists; See Berg at least column 16 lines 29-34, e.g.

"When a user elects to open the "flowname.flow" workflow file, the workflow manager

displays the flow setting steps to the states mandated by their dependencies. After

opening the workflow file, the user(s) can begin to perform work with the workflow."

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to use Honarvar's projects with Berg's workflow functional

components in order to describe basic attributes of steps in a workflow, define the

appearance of a workflow, and specify actions for the steps in the workflow as suggested

by Berg at column 9 lines 3-6.

Honarvar further discloses:

designing, by at least one data processor, rules; generating, by at least one data

processor, rules, models, and strategies with graphical user interfaces; See Fig. 23 and

associated text at column 20 lines 62-67, e.g.:

> …a system user enters **strategies**, edits strategies, selects strategies, and defines versions,
> by entering information **in a GUI** 450 running on workstation 400. The strategies and
> associated information entered in GUI 450 are stored in a relational data **model** 452.

Note that the "strategies" and model are interpreted simply as the rules, as directed on

page 20 lines 23-25 of Applicant's originally filed specification.

producing, by at least one data processor, a predictive score at runtime for a

given transaction with the models; Honarvar teaches the use of scores using transaction

models. See at least Fig. 4(A), element 93, e.g. "Risk Score."

testing, by at least one data processor, the rules by tracking statistics on which

rules, models, and strategies were used …Honarvar teaches tracking statistics on which

strategies were used and how many times. See column 5 lines 26-63, also column 6 lines

56-65, e.g. "monitors performance."

Honarvar does not expressly disclose statistics on *how many times.* However,

Adams teaches that tracking execution counts are common statistical information. See at

least column 1 lines 37, e.g. "execution counts." It would have been obvious to one of

ordinary skill in the art at the time the invention was made to use Honarvar's testing with

Adams' execution counts in order to provide performance evaluation as suggested by

Adams at column 1 lines 34-37.

Honarvar further discloses:

modifying the rules, models, and strategies based on the testing. See Honarvar

column 5 line 67 - column 6 line 2, e.g. "formation of a hybrid strategy." Also see

column 6 lines 63-65, e.g. "refines the selected strategy version in accordance with the monitored performance."

Conclusion

32.　　Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES RUTTEN whose telephone number is (571)272-3703. The examiner can normally be reached on M-F 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571)272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. Derek Rutten/
Primary Examiner, Art Unit 2192